AMENDMENTS TO THE ABSTRACT:

Kindly replace the previous Abstract of the Disclosure with the following new abstract.

The ~~present~~ invention ~~is to~~ provides an automatic zero point correction device that includes a pressure sensor, wherein output from the sensor is outputted and the sensor output is inputted to a time-varying zero point drift correction means of the sensor; a sensor output judgment means of the time-varying zero point drift correction means, wherein the sensor output judgment means operates to make a judgment determining whether the sensor output is larger than a set value; and operating condition judgment means of the time-varying zero point drift correction means, wherein the operating condition judgment means judges operating conditions of the sensor, wherein the time-varying zero point drift correction means operates to cancel time-varying zero point drift of the sensor when the sensor output judgment means determines sensor output is larger than the set value and the operating condition judgment means determines operating conditions of the sensor are within previously set operating conditions. ~~a pressure sensor to make it possible to detect pressure accurately regardless of its service period by automatically correcting the time-varying zero drift of the pressure sensor, and also a pressure control device and a flow rate control device wherein the pressure sensor is employed.~~

~~Concretely, with the pressure sensor, for which a semiconductor pressure sensitive element is used, to measure fluid pressure, the output voltage from the pressure sensor is outputted to the outside through the amplifier, the afore-mentioned sensor output voltage is inputted to the time-varying zero point drift correction means through the D/A converter, a judgment is made to determine if the afore-mentioned sensor output voltage is larger than the set value at the sensor output judgment means of the said time-varying zero~~

~~point drift correction means, and further the operating conditions of the pressure sensor are judged at the operating condition judgment means of the afore-mentioned time-varying zero point drift correction means, and the time-varying zero point drift of the pressure sensor is cancelled by inputting the voltage for the zero point correction, which is identical to the afore-mentioned sensor output voltage and with reversed polarity, to the offset terminal of the afore-mentioned amplifier through the D/A converter when it is found that the afore-mentioned sensor output voltage is larger than the set value and the operating conditions of the pressure sensor are under the operating conditions previously set.~~